

Abstract

~~The~~ An x-ray diagnostic imaging system ~~of this invention~~ ~~is provided with:~~ an x-ray irradiation unit for irradiating an object ~~to be examined with x-rays~~; an x-ray diaphragm unit ~~disposed in a direction of x-ray irradiation of the x-ray irradiation unit and for~~ shielding the irradiated x-rays except for the x-rays irradiated on a portion used for obtaining an x-ray image of the object ~~to be examined~~; an x-ray diaphragm setting unit for variably setting the ~~x-ray shielded~~ portion to be shielded ~~by the x-ray diaphragm unit~~; an x-ray flat panel detector opposed to the x-ray irradiation unit via the object to be examined ~~and imaging x-rays passed through the object to be examined as an x-ray image~~; an image processing unit for subjecting the x-ray image ~~obtained by the x-ray flat panel detector to an image processing~~; and a display unit displaying the x-ray image. ~~subjected to the image processing by the image processing unit, wherein the~~ The image processing unit ~~is provided with:~~ includes a calculation unit reading out data of an x-ray detection element ~~of the x-ray flat panel detector corresponding to the x-ray shielded portion which is variably set by the x-ray diaphragm setting unit~~ and calculating a line noise component from the read out data ~~of the x-ray detection element~~; and a line noise correction unit correcting a line noise of the x-ray image based on the line noise component calculated by the calculation unit.